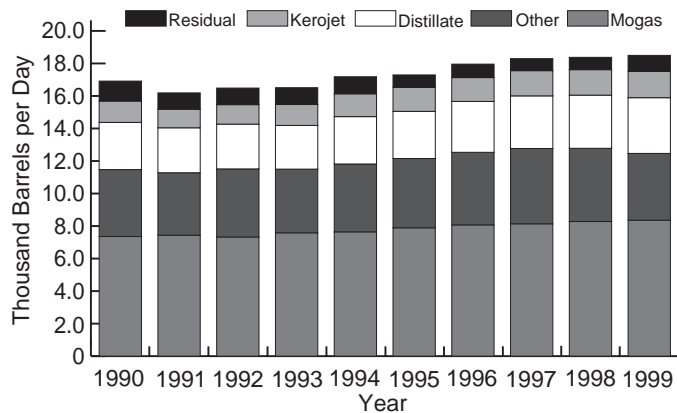


# Highlights

The Nation's strong economy continues to fuel the demand for petroleum, as total demand for refined petroleum products set a May record high. The total demand for refined petroleum products, measured as product supplied, averaged 18.5 million barrels per day during May 1999<sup>1</sup> (Table & Figure H1). With low inflation and tight labor markets, consumer confidence remained high in May.<sup>2</sup> On average, cooling degree day temperatures across the U.S. were cooler than normal and considerably cooler than this time last year, according to data collected by the National Oceanic and Atmospheric Administration.<sup>3</sup>

**Figure H1. Total Demand, 1990-Current, Comparison in May for Petroleum Products**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

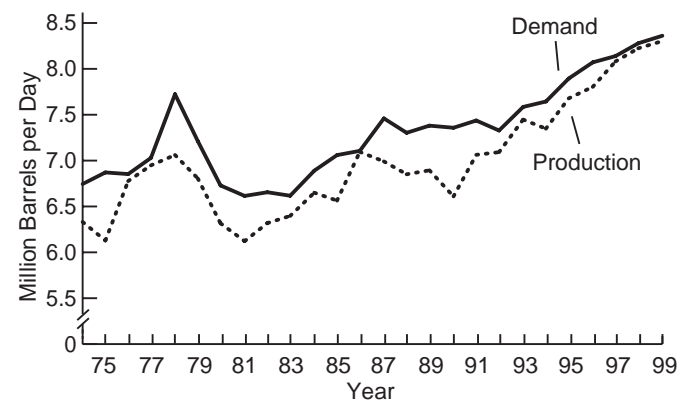
Highlights for May 1999 include:

- Both **demand** and **production** of finished motor gasoline set **record highs for the month**, averaging 8.4 million barrels per day and 8.3 million barrels per day, respectively. **Stocks** ended the month at their highest total for May since 1994, 176.9 million barrels.
- Distillate fuel oil **demand** set a **May record high** at an average of 3.4 million barrels per day. Distillate **imports** averaged 244 thousand barrels per day, the highest May average since 1989. End-of-month **stocks** totaled 131.4 million barrels, **4.9 million barrels below last year**.
- At an average of 894 thousand barrels per day, **demand** for residual fuel oil was at the highest average for the month since 1994. **Stocks** also ended the month at their highest level for May since 1994, totaling 40.1 million barrels.
- Demand** for kerosene-type jet fuel averaged 1.6 million barrels per day, **another May record high**. **Production** of kerosene-type jet fuel also set a **May record high** at an average of 1.5 million barrels per day. End-of-month

kerosene-type jet fuel **stocks** totaled 44.8 million barrels, **yet another May record high**.

- Stocks of propane experienced another modest build, but still managed to end the month in the upper limit of the average range for this time of year at 45.7 million barrels.
- Domestic crude oil **production** averaged 5.8 million barrels per day, the **lowest average for the month in 47 years**. **Imports** were at a near record for the month, averaging 8.8 million barrels per day. **Stocks**, excluding the Strategic Petroleum Reserve (SPR), ended the month totaling 332.2 million barrels.

**Figure H2. Finished Motor Gasoline, Year-to-Date May Comparisons, 1974-1999**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Motor Gasoline

**Demand** for finished motor gasoline set a **record high for the month** at an average of 8.4 million barrels per day, an increase of 1.0 percent from last May (Figure H2). Motorists enjoyed the Memorial Day weekend, considered the kickoff of the summer driving season, with gasoline prices only 4.5 percent higher than last year's unusually low average. Conventional motor gasoline retail prices averaged \$1.133 a gallon, including taxes, this month (Figure H3).<sup>4</sup> **Production** of finished motor gasoline was also at a **record high for this time of year**, averaging 8.3 million barrels per day. In the face of declining refining margins in May, refineries kept up gasoline production ahead of the expected record driving season.<sup>5</sup> Finished motor gasoline **imports** were healthy for this time of year, averaging 357 thousand barrels per day. **Stocks** of finished motor gasoline ended the month **3.0 million barrels higher than last May** at a total of 176.9 million barrels.

<sup>1</sup> May 1999 data are monthly-from-weekly estimates based on the Energy Information Administration's Weekly Petroleum Supply Reporting System.

<sup>2</sup> "Consumer Confidence Up For 7<sup>th</sup> Month", Reuters, May 25, 1999, accessible via the Internet at <http://dailynews.yahoo.com/headlines/>.

<sup>3</sup> "Cooling Degree Day Data Monthly Summary, Monthly Data for May 1999", *National Oceanic and Atmospheric Administration*, accessible via the Internet at <http://www.cpc.ncep.noaa.gov>.

<sup>4</sup> "Table 16. U.S. Retail Motor Gasoline and On-Highway Diesel Fuel Prices, 1998 to Present", *Weekly Petroleum Status Report*, June 4, 1999, p. 27.

<sup>5</sup> "Retail Gasoline Price Gains Ease; Pumps Already Peak, EIA Says", *Oxy-Fuel News Monthly Markets Update*, May 17, 1999, p. 1.

**Table H1. Petroleum Supply Summary**  
(Million Barrels per Day, Except Where Noted)

| Category                                       | 1999          |       |                         | 1998  | January - May |      |
|--|---------------|-------|-------------------------|-------|---------------|------|
|  | Estimated May | April | Difference <sup>a</sup> | May   | 1999          | 1998 |
| <b>Products Supplied</b> .....                 | 18.5          | 18.9  | -0.4                    | 18.4  | 19.0          | 18.6 |
| Finished Motor Gasoline.....                   | 8.4           | 8.4   | (s)                     | 8.3   | 8.1           | 8.0  |
| Distillate Fuel Oil.....                       | 3.4           | 3.4   | (s)                     | 3.3   | 3.6           | 3.5  |
| Residual Fuel Oil .....                        | 0.9           | 0.6   | 0.2                     | 0.8   | 0.9           | 0.9  |
| Jet Fuel.....                                  | 1.6           | 1.6   | (s)                     | 1.6   | 1.7           | 1.6  |
| Other Petroleum Products <sup>b</sup> .....    | 4.2           | 4.8   | -0.6                    | 4.5   | 4.8           | 4.6  |
| <b>Crude Oil Inputs</b> .....                  | 15.0          | 15.0  | (s)                     | 15.3  | 14.7          | 14.7 |
| <b>Operating Utilization Rate (%)</b> .....    | 95.1          | 95.0  | 0.1                     | 99.3  | 93.3          | 96.0 |
| <b>Imports</b> .....                           | 10.8          | 11.2  | -0.4                    | 11.1  | 10.6          | 10.5 |
| Crude Oil .....                                | 8.8           | 9.1   | -0.3                    | 9.0   | 8.7           | 8.5  |
| Strategic Petroleum Reserve .....              | 0.0           | 0.0   | 0.0                     | 0.0   | 0.0           | 0.0  |
| Other.....                                     | 8.8           | 9.1   | -0.3                    | 9.0   | 8.7           | 8.5  |
| <b>Products</b> .....                          | 2.0           | 2.1   | -0.1                    | 2.1   | 2.0           | 2.0  |
| Finished Motor Gasoline.....                   | 0.4           | 0.4   | -0.1                    | 0.3   | 0.4           | 0.3  |
| Distillate Fuel Oil.....                       | 0.2           | 0.2   | (s)                     | 0.2   | 0.2           | 0.2  |
| Residual Fuel Oil .....                        | 0.3           | 0.2   | 0.1                     | 0.2   | 0.2           | 0.2  |
| Jet Fuel.....                                  | 0.1           | 0.1   | (s)                     | 0.2   | 0.1           | 0.1  |
| Other Petroleum Products <sup>c</sup> .....    | 1.1           | 1.2   | -0.1                    | 1.2   | 1.0           | 1.1  |
| <b>Exports</b> .....                           | 1.0           | 1.2   | -0.2                    | 1.1   | 0.9           | 1.0  |
| Crude Oil .....                                | 0.1           | 0.3   | -0.2                    | 0.1   | 0.2           | 0.2  |
| Products .....                                 | 0.9           | 0.9   | (s)                     | 0.9   | 0.8           | 0.9  |
| <b>Total Net Imports</b> .....                 | 9.8           | 10.0  | -0.2                    | 10.1  | 9.7           | 9.4  |
| <b>Stock Change<sup>d</sup></b> .....          | 0.6           | 0.2   | 0.4                     | 1.2   | -0.1          | 0.6  |
| Crude Oil .....                                | -0.1          | -0.2  | 0.1                     | (s)   | (s)           | 0.3  |
| Products .....                                 | 0.7           | 0.4   | 0.3                     | 1.2   | -0.1          | 0.3  |
| <b>Total Stocks</b> .....                      | 1,645         | 1,615 | 29                      | 1,652 | —             | —    |
| <b>(million barrels)</b>                       |               |       |                         |       |               |      |
| <b>Crude Oil</b> .....                         | 905           | 902   | 2                       | 914   | —             | —    |
| Strategic Petroleum Reserve <sup>e</sup> ..... | 572           | 572   | (s)                     | 563   | —             | —    |
| Other.....                                     | 332           | 330   | 2                       | 351   | —             | —    |
| <b>Products</b> .....                          | 740           | 713   | 27                      | 738   | —             | —    |
| Finished Motor Gasoline.....                   | 177           | 169   | 8                       | 174   | —             | —    |
| Distillate Fuel Oil.....                       | 131           | 125   | 6                       | 136   | —             | —    |
| Residual Fuel Oil .....                        | 40            | 41    | (s)                     | 39    | —             | —    |
| Jet Fuel.....                                  | 45            | 44    | (s)                     | 43    | —             | —    |
| Other Petroleum Products <sup>c</sup> .....    | 347           | 334   | 13                      | 346   | —             | —    |

<sup>a</sup> Difference is equal to volume for current month minus volume for previous month.

<sup>b</sup> Includes crude oil product supplied, natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, and jet fuel.

<sup>c</sup> Includes natural gas liquids, liquefied refinery gases (LRG's), other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate fuel oil, and residual fuel oil.

<sup>d</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>e</sup> Crude oil stocks in the Strategic Petroleum Reserve include non-U.S. stocks held under foreign or commercial storage agreements.

(s) = Less than 0.05 million barrels per day, or less than 0.05 percent, or less than 0.5 million barrels.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration (EIA), 1998, *Petroleum Supply Annual*, Volume II; appropriate issues of the *Petroleum Supply Monthly* and the *Weekly Petroleum Status Report*.

Data for the current month are preliminary estimates, based on weekly submissions. For an explanation of estimation methodology and accuracy, see Appendix A of *Weekly Petroleum Status Report* and the article, "Accuracy of Petroleum Supply Data", published in the October 1998, *Petroleum Supply Monthly*.

**Table H2. U.S. Refinery Inputs, Capacities<sup>1</sup> and Utilization Rates: 1998-1999**  
(Thousand Barrels per Day, Except Where Noted)

| Item   | Jan    | Feb    | Mar    | April  | May    | June   | July   | Aug    | Sept   | Oct    | Nov    | Dec    |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>1998</b>                                    |        |        |        |        |        |        |        |        |        |        |        |        |
| Gross Refinery Inputs .....                    | 14,661 | 14,262 | 14,901 | 15,301 | 15,464 | 15,671 | 15,705 | 15,806 | 15,040 | 14,222 | 15,095 | 15,169 |
| Operating Refinery Capacity <sup>2</sup> ..... | 15,538 | 15,558 | 15,550 | 15,547 | 15,573 | 15,686 | 15,691 | 15,685 | 15,699 | 15,343 | 15,478 | 15,797 |
| Idle Capacity <sup>3</sup> .....               | 173    | 158    | 184    | 144    | 135    | 135    | 135    | 143    | 129    | 537    | 449    | 154    |
| Idle Three Months or Less .....                | 47     | 20     | 46     | 0      | 0      | 0      | 0      | 14     | 0      | 420    | 369    | 37     |
| Idle More than Three Months .....              | 127    | 138    | 138    | 144    | 135    | 135    | 135    | 129    | 129    | 117    | 80     | 117    |
| Operable Refinery Capacity .....               | 15,711 | 15,716 | 15,735 | 15,692 | 15,708 | 15,821 | 15,826 | 15,828 | 15,828 | 15,880 | 15,927 | 15,951 |
| Utilization Rate (percent)                     |        |        |        |        |        |        |        |        |        |        |        |        |
| Operating Capacity .....                       | 94.4   | 91.7   | 95.8   | 98.4   | 99.3   | 99.9   | 100.1  | 100.8  | 95.8   | 92.7   | 97.5   | 96.0   |
| Operable Capacity .....                        | 93.3   | 90.7   | 94.7   | 97.5   | 98.4   | 99.1   | 99.2   | 99.9   | 95.0   | 89.6   | 94.8   | 95.1   |
| <b>1999</b>                                    |        |        |        |        |        |        |        |        |        |        |        |        |
| Gross Refinery Inputs .....                    | 14,762 | 14,719 | 14,802 | 15,333 |        |        |        |        |        |        |        |        |
| Operating Refinery Capacity <sup>2</sup> ..... | 15,953 | 15,955 | 16,139 | 16,140 |        |        |        |        |        |        |        |        |
| Idle Capacity <sup>3</sup> .....               | 200    | 227    | 131    | 132    |        |        |        |        |        |        |        |        |
| Idle Three Months or Less .....                | 71     | 98     | 2      | 0      |        |        |        |        |        |        |        |        |
| Idle More than Three Months .....              | 129    | 129    | 129    | 132    |        |        |        |        |        |        |        |        |
| Operable Refinery Capacity .....               | 16,153 | 16,181 | 16,270 | 16,271 |        |        |        |        |        |        |        |        |
| Utilization Rate (percent)                     |        |        |        |        |        |        |        |        |        |        |        |        |
| Operating Capacity .....                       | 92.5   | 92.3   | 91.7   | 95.0   |        |        |        |        |        |        |        |        |
| Operable Capacity .....                        | 91.4   | 91.0   | 91.0   | 94.2   |        |        |        |        |        |        |        |        |

<sup>1</sup>Capacities are on a calendar day basis.

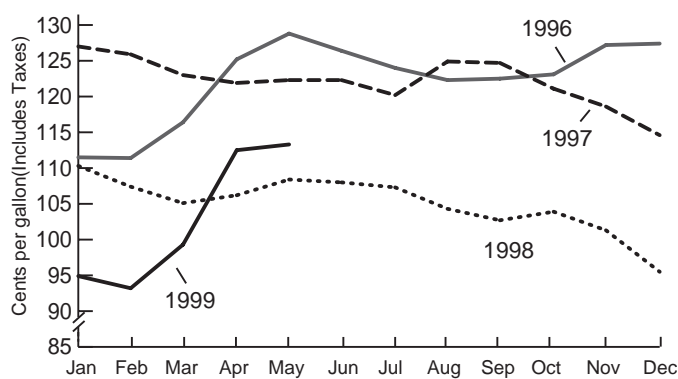
<sup>2</sup>Operating capacity equals the operable capacity less the total idle capacity.

<sup>3</sup>Idle capacity is the component of operable capacity that is not in operation and not under active repair, but is capable of being placed in operation within 30 days; and capacity not in operation but is under active repair that can be completed within 90 days.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration (EIA), 1998, *Petroleum Supply Annual*, Volume 2, Table 16; EIA, *Petroleum Supply Monthly*, 1999 data issue, Table 28.

**Figure H3. Retail Prices for Conventional Motor Gasoline, 1996-current**



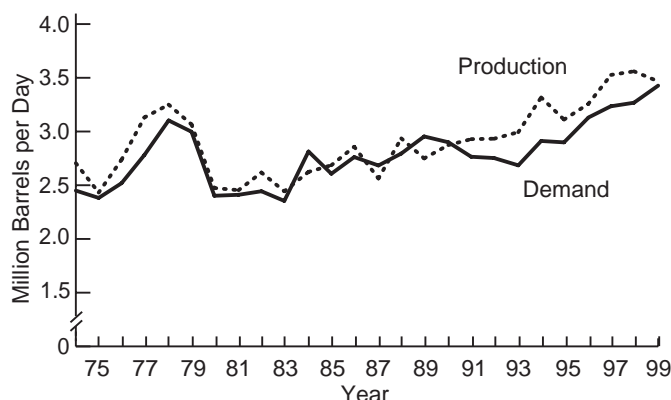
Source: Energy Information Administration, *Weekly Petroleum Status Report*, DOE/EIA-0208 (various issues).

## Distillate Fuel Oil

**Demand** for distillate fuel oil set a **record high average for the month** at 3.4 million barrels per day (Figure H4). Seasonal increases from the agricultural industry as well as a strong demand from the transportation sector helped boost demand to the new record. Along U.S. railroads, slightly higher carload freight combined with a healthy increase in intermodal traffic, increased distillate fuel oil demand.<sup>6</sup> Distillate fuel oil **production** was down from last May's record high to an average of 3.5 million barrels per day. Distillate **imports** were robust for the month at an average of 244 thousand barrels per day. Distillate imports were at the highest average for the month since 1989. Total distillate **stocks** were down 4.9 million barrels from this time last year, to a total of 131.4 million barrels. Stocks of diesel ended the month up 1.1 percent compared to last year, while heating oil stocks were off 8.3 percent from their year-ago counterpart.

<sup>6</sup> "Rail Carload Freight Up Slightly During May", *Association of American Railroads*, June 3, 1999, accessible via the Internet at <http://www.aaa.org>.

**Figure H4. Distillate, Year-to-Date May Comparisons, 1974-1999**

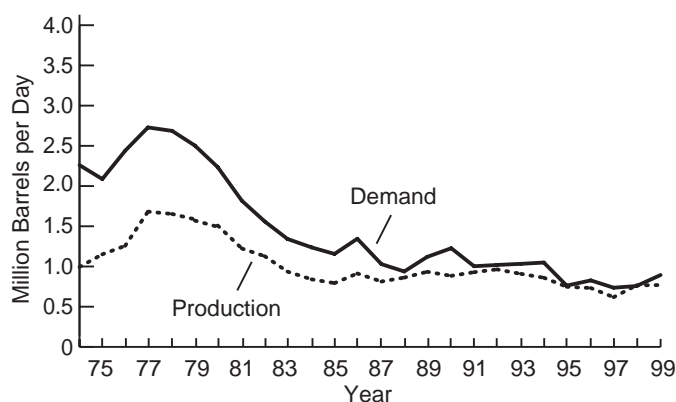


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Residual Fuel Oil

Demand for residual fuel oil was **up 18.1 percent compared to last May** while production was up only slightly compared to the average a year ago. **Demand** for residual fuel oil averaged 894 thousand barrels per day and **production** averaged 769 thousand barrels per day, both at their highest averages for the month in the past several years (Figure H5). While residual fuel oils price competitiveness is reasoned to be behind the year-on-year gains for demand, as electric utilities prefer the cheaper feedstock, this price advantage is expected to narrow as the year progresses.<sup>7</sup> Residual fuel oil **imports** were also higher than normal for the month at an average of 261 thousand barrels per day. End-of-month **stocks** totaled 40.1 million barrels, the highest level to end the month since 1994.

**Figure H5. Residual, Year-to-Date May Comparisons, 1974-1999**

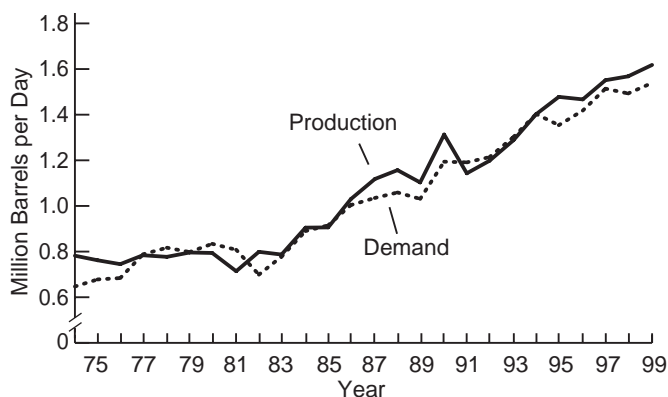


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Kerosene-Type Jet Fuel

Kerosene-type jet fuel **demand** averaged 1.6 million barrels per day, a **record for the month** (Figure H6). **Production** of kerosene-type jet fuel also set a new **record for May**, averaging 1.5 million barrels per day. **Imports** during the month of total jet fuel, kerosene and naphtha-type, were normal for this time of year. Total jet fuel imports averaged 95 thousand barrels per day. **Stocks** of kerosene-type jet fuel ended the month at a **record high** for this time of year, 44.8 million barrels.

**Figure H6. Kerojet, Year-to-Date May Comparisons, 1974-1999**



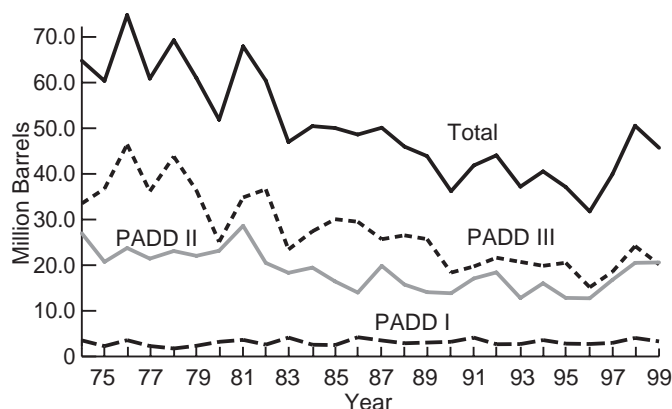
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Propane

End-of-month propane stocks continued to lag the 5-year average build rate for the second month in a row. A weak build in the Gulf Coast limited the build to a modest 5.6 million barrels compared to May's 5-year average of 8.7 million barrels. While May's stock build was modest, month-end inventories stood at **the second highest level for the month since 1988** (Figure H7). U.S. inventories of propane ended the month at 45.7 million barrels per day, which was in the upper limit of the average range for this time of year. Midwest inventories gained 4.2 million barrels during the month for a total of 20.6 million barrels. Gulf Coast inventories increased by a meager 459 thousand barrels to end the month totaling 20.2 million barrels. Propane inventories along the East Coast added another 425 thousand barrels for a total of 3.3 million barrels. Only Midwest inventories ended the month above 1998 levels, as well as above normal for this time of year.

<sup>7</sup> "U.S. Oil Demand", *Short-Term Energy Outlook*, April 1999, p. 58.

**Figure H7. Propane Stocks, Year-to-Year May Comparisons, 1974-1999**



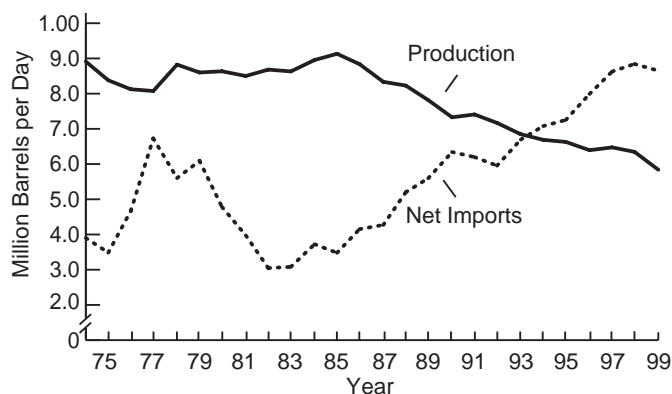
Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Crude Oil

Domestic crude oil **production** was at the **lowest average for the month since 1952**, averaging 5.8 million barrels per day (Figure H8). Field production of Alaskan crude oil averaged only 1.1 million barrels per day, the lowest average for May since the Trans Alaska Pipeline System (TAPS) was brought on line. **Imports** averaged 8.8 million barrels per day, 232 thousand barrels per day below the record high for the month set last year. Net imports of crude oil, gross imports minus exports, averaged 8.7 million barrels per day. With imports at such high levels, domestic industry groups are seeking an investigation by the U.S. Bureau of Export Administration as to whether or not crude oil is being marketed unfairly or “dumped” into the U.S. from abroad.<sup>8</sup> The end of the month marked the end of the fifth phase of U.N. sanctioned oil-for-food sales for Iraq and the beginning of the sixth round of sales under the program.<sup>9</sup>

Crude oil **stocks**, excluding the SPR, ended the month totaling 332.2 million barrels, **down 5.3 percent compared to last May**. Total crude oil stocks, including non-U.S. stocks held under foreign or commercial storage agreements, totaled 904.6 million barrels.

**Figure H8. Crude Oil, Year-to-Date May Comparisons for Production and Net Imports, 1974-1999**

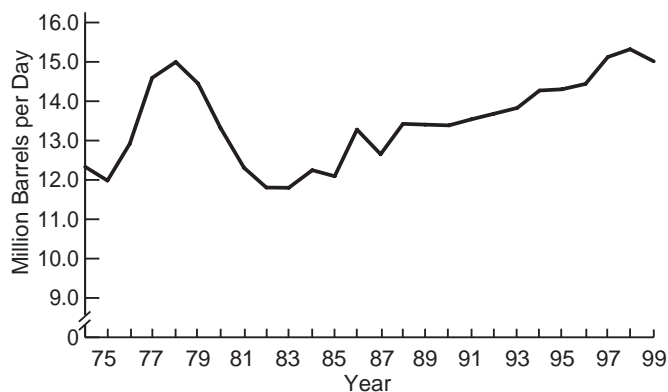


Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

## Refinery Operations

Crude oil **inputs** were at their lowest average for the month since 1996, averaging 15.0 million barrels per day (Figure H9). The estimated refinery **operable utilization rate** (gross input divided by operable capacity) remained below last year’s average as continuing problems along the West Coast pulled down the average to 93.9 percent of capacity.

**Figure H9. Year-to-Date May Comparisons for Crude Oil Inputs, 1974-1999**



Source: Energy Information Administration, *Petroleum Supply Annual*, DOE/EIA-0340 (various issues), and *Petroleum Supply Monthly*, DOE/EIA-0109 (various issues).

<sup>8</sup> “Commerce Probe of Imports May Let IPAA Pass on Dumping Initiative”, *The Oil Daily*, May 7, 1999, p. 5.

<sup>9</sup> “Iraq backs renewal of oil-for-food deal”, *Platt’s Oilgram News*, May 26, 1999, p. 3.